

What we are learning about the demographics of U. S. farm operators



Prepared by Rich Allen and Ginger Harris
National Agricultural Statistics Service
U.S. Department of Agriculture

Goals for the session

- ❖ Clarify the data available from the 2002 Ag Census
- ❖ Examine ages of farmers in light of new multiple operator data
- ❖ Develop a definition of possible succession planning evidence
- ❖ Summarize findings under the new definition

Key Caveats

- ❖ The Ag Census did not ask about farm succession
- ❖ The Ag Census focuses on farm operations, not farm owners
- ❖ All analyses assume operators want to maintain the present operations as they are

Important considerations

- ❖ The Ag Census uses mail-out, mail-back data collection
- ❖ Operators are defined as being responsible for day-to-day management decisions
- ❖ U.S. farms are extremely heterogeneous

Farm Definition

Any place from which \$1,000 or more of agricultural products were produced during the census year.



Conclusion 1: Average age of principal farm operators has constantly increased since 1982 (Table 1)

Year	Average age	% of total principal operators	
		over 65	Under 35
1974	51.7	18.5	12.8
1982	50.5	17.8	15.9
1992	53.3	24.8	10.7
2002	55.3	26.2	5.8

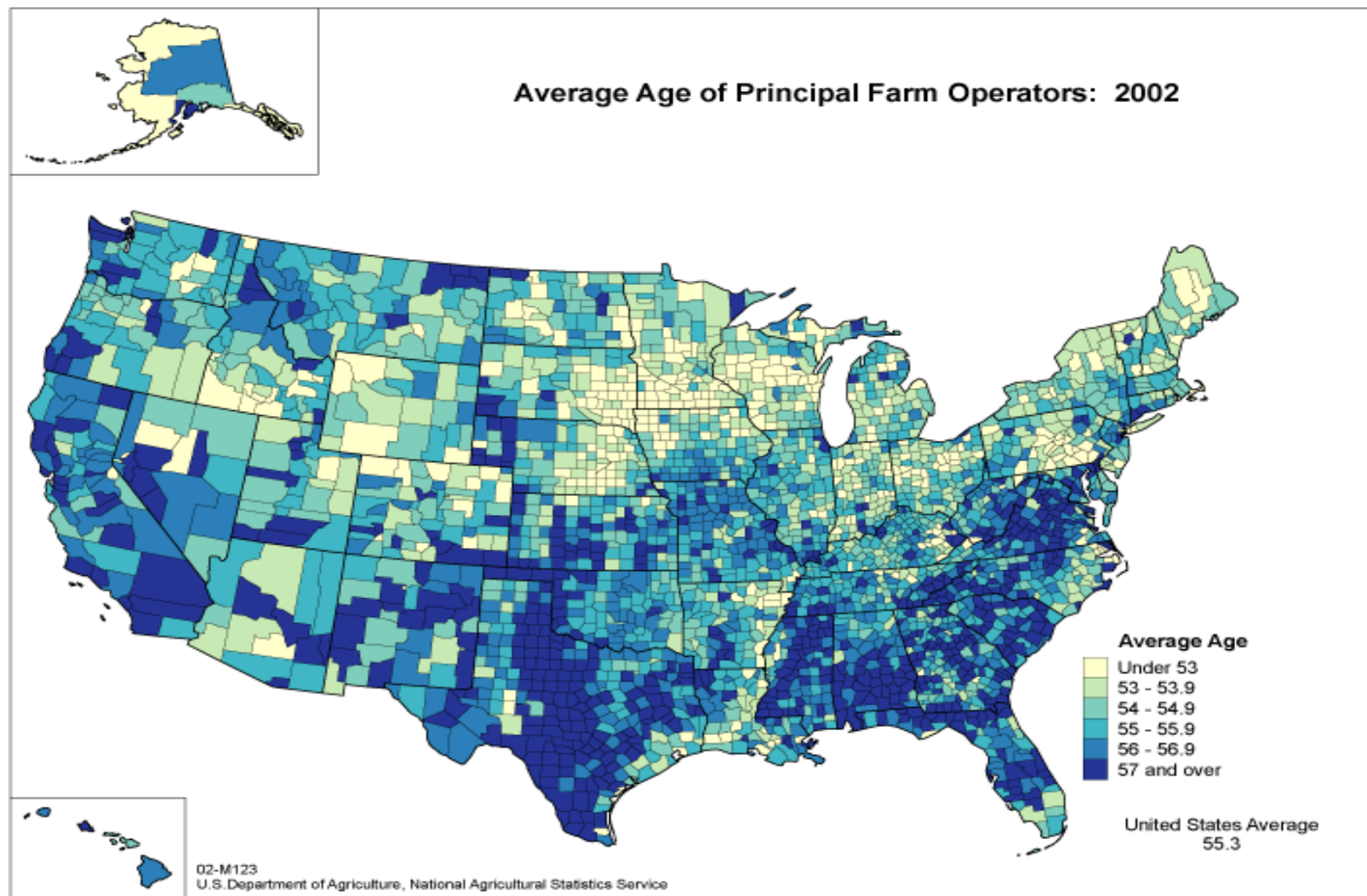
Conclusion 2: Beware of average age of all principal operators

- ❖ Age is related to type of farm, size of farm, farm income class, location, type of operating arrangement, and other factors
- ❖ However, there are some patterns that may be worthy of note

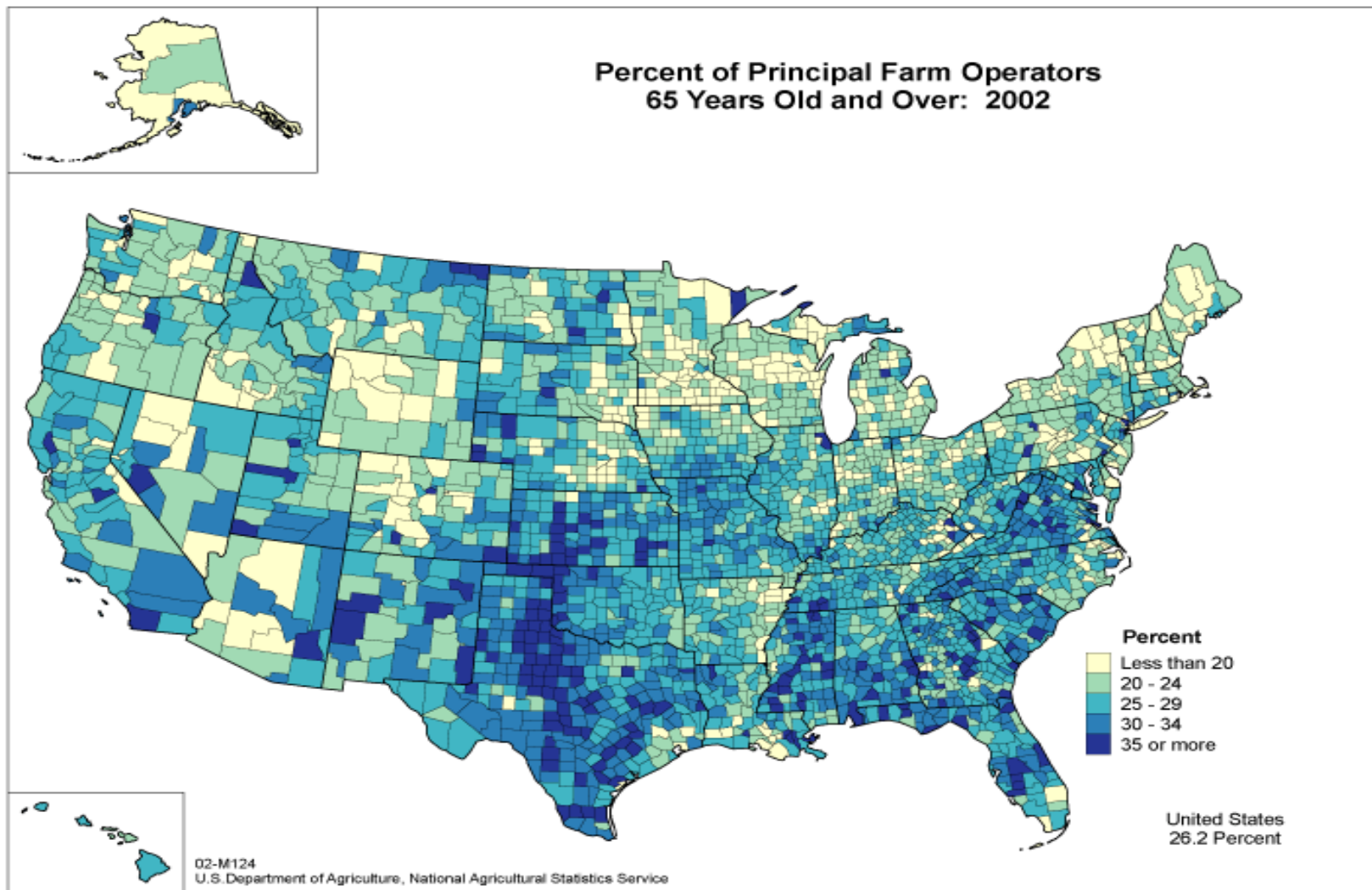
Conclusion 3: Average age of principal farm operators is related to climate (Table 2)

- ❖ State with lower (1.2 years or more) average ages are in cooler climates (ID, IN, ME, MN, NE, NH, NY, OH, PA, SD, VT, WI, WY)
- ❖ States with higher (1.2 years or more) average ages are in warmer climates (AL, CA, FL, GA, HI, MS, SC, TX, VA)

Map 1: Average Age of Principal Farm Operators: 2002



Map 2: Percent of Principal Farm Operators 65 Years and Over: 2002



Conclusion 4: Average age of principal farm operators is related to sales (Table 3)

- ❖ Average ages of operators in sales classes above \$50,000 were below the overall U.S. average age
- ❖ Average ages of operators in nearly every sales class below \$50,000 were above the overall U. S. average age

Conclusion 5: Average age is related to type of farm (Table 5)

- ❖ Lowest average ages were for hogs (49.2), dairy (51.6), and poultry (51.6)
- ❖ Highest average ages were for beef cattle (56.7), fruit and tree nut (57.7), and "other crops" (56.5)
- ❖ Average ages for most farm types are below the 55.3 years of age average since beef cattle farms are 31.2 % of all farms

Conclusion 6: Average age is related to tenure and type of occupation (Table 6)

- ❖ Full owners averaged 57.0 years
- ❖ Part owners averaged 53.1 years
- ❖ Tenants averaged 47.2 years
- ❖ If principal occupation was farming, average age was 57.0
- ❖ If principal occupation was not farming, average age was 53.0

Census change #1: Data are now provided for all farms (Table 1)

- ❖ Past censuses provided detailed information for only farms on the mail list
- ❖ Tabulated size distributions of farms were misleading

Census change #2: Data collected for all farm operators (Table 7)

- ❖ Past censuses had asked only about the principal operator
- ❖ No other data series attempted to count all farmers

Average Age Results, by operator "number" and gender

	Average age	Average age by gender	
		Men	Women
Principal operators	55.3	55.1	56.7
Second operators	49.5	47.9	50.3
Third operators	41.9	40.0	45.2
All operators	53.2	53.7	51.9

Census change #3: Data collected for households of each operator (Table 8)

- ❖ People living in the household
- ❖ Households sharing in the net farm income
- ❖ Percent of the principal operator's household income from the farm

3-Dimensional Data Analysis Approach

- ❖ Original data containing actual ages for principal, second, and third operators were used
- ❖ Cross tabulation tables of age, gender, and household members were examined
- ❖ Table 10 of the reports illustrates some 2-dimensional comparisons

Conclusion 7: Most female second operators were spouses (Table 10)

- ❖ Male principal operators and female second operators were mainly of similar ages
- ❖ Male principal operators and female second operators were mainly in the same household
- ❖ Female principal operators and male second operators showed more variation in ages and households

Definition of possible succession plan

- ❖ A farm operation was considered to demonstrate a possible succession plan if two different generations were present
- ❖ Two generations is defined as one of the three operators is at least 20 years older or younger than one of the other two

Percentage age relationships of male principal operators and male second operators

Age of principal operator	Principal and 2 nd operator age difference			% in different generations
	Principal operator more than 20 years younger	Age gap less than 20 years	Principal operator more than 20 years older	
<25	63.4	36.6	0	63.4
25-34	49.7	50.3	0	49.8
35-44	29.4	65.5	5.1	34.5
45-54	12.5	64.0	23.6	36.0
55-64	2.6	46.7	50.6	53.3
65-74	0.2	27.3	72.5	72.7
>=75	0.0	14.7	85.3	85.3
Total	12.3	47.4	40.4	52.6

Examples of operations which may have a succession plan in place

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Conclusion 8: Most multiple operator farms have only one generation (Table 12)

- ❖ There are 803,127 farms with multiple operators
- ❖ Only 193,631 farms had two or more different generations
- ❖ Thus, only 24.1% of multiple generation farms (or 9.1% of all farms) have succession evidence

Conclusion 9: Succession evidence does vary by income class (Table 12)

- ❖ 21.4% of multiple operator farms under \$100,000 in sales had different generations
- ❖ The % was 34.3 for farms with sales between \$100,000 and \$250,000
- ❖ The % was 38.8 for farms with sales above \$250,000

Percent of all farms with different generations, by sales class 2002

	% with multiple operators	% with different generations	
		w/multiple operators	All farms
< \$100k	36.6	21.4	7.8
\$100k but < \$250k	39.9	34.3	13.7
\$250 k & over	48.1	38.8	18.7
All farms	37.7	24.1	9.1

Conclusion 10: Succession evidence does vary by type of farm (Table 12)

- ❖ The highest percents of multiple operator farms with different generations were for dairy (37.1), cotton (35.9), and tobacco (33.2) farms
- ❖ The lowest percents were for aquaculture and other animal (16.4), sheep and goat (17.9), and poultry (20.0) farms

Summary 1: Age and succession planning is a Good News/Bad News story

- ❖ Average age of farmers increased again—to 55.3
- ❖ There are many (803,127) farms with multiple operators
- ❖ Many 2nd and 3rd operators are spouses or others of similar age as the principal operator

Summary 2: Good News/Bad News, continued

- ❖ About a quarter (24.1%) of farms with multiple operators have different generations
- ❖ Nearly 2 in 5 (38.8%) of multiple operator farms with over \$250,000 in sales have different generations